

## **CLAIMS**

What is claimed is:

1. A method comprising:

outputting an Electronic Programming Guide (EPG) for display by a client,  
wherein:

the EPG includes a plurality of representations of a plurality of content;  
at least one said content is television programming for receipt by the client  
over an Internet;

the client includes a plurality of applications;  
one or more said content is provided for output by a respective said  
application; and

the EPG is configured to form one or more events in response to user  
interaction with one or more said representations; and  
executing a virtual tuner on the client to manage execution of each said  
application to provide respective said content in response to the events formed utilizing  
the EPG.
2. The method as described in claim 1, wherein the virtual tuner is further  
executed to manage a lifecycle of each said application.
3. The method as described in claim 1, wherein the virtual tuner manages the  
execution by:

launching one or more said applications for outputting said content selected

utilizing the EPG; and

terminating the one or more said applications when the outputting is completed.

4. The method as described in claim 1, wherein:

the executing of the virtual tuner further comprises managing one or more windows; and

at least one said window is utilized to display the respective said content.

5. The method as described in claim 4, wherein the managing of the one or more windows includes displaying the at least one said window in a foreground of a display in response to one or more said events.

6. The method as described in claim 1, wherein said content provided by a first said application is not compatible with a second said application.

7. The method as described in claim 1, wherein the plurality of content includes remote content available over the Internet and local content available locally on the client.

8. One or more computer readable-media comprising computer executable instructions that, when executed on a computer, direct the computer to perform the method of claim 1.

9. In a virtual tuner executed on a client, a method comprising:

receiving a selection made from a plurality of content using an EPG that is output by the client, wherein:

the EPG includes a representation of each said content;

each said content is provided for output by a respective one or more of a plurality of applications; and

at least one said content is television programming;

choosing one or more of the plurality of applications that, when executed, provide the selected content; and

managing execution of the chosen one or more applications to output the selected content.

10. The method as described in claim 9, wherein the managing includes:

launching the chosen one or more applications for outputting the selected said content; and

terminating the chosen one or more applications when the outputting is completed or an event is received from the EPG.

11. The method as described in claim 9, wherein the managing is performed in response to one or more events received from the EPG.

12. The method as described in claim 9, wherein the managing includes managing a lifecycle of the chosen one or more applications.

13. The method as described in claim 9, wherein said content provided by a first said application is not compatible with a second said application.

14. The method as described in claim 9, wherein:

the managing includes managing one or more windows; and

at least one said window is utilized to display the selected content.

15. The method as described in claim 9, wherein the plurality of content includes remote content available over the Internet and local content available locally on the client.

16. One or more computer readable-media comprising computer executable instructions that, when executed on a computer, direct the computer to perform the method of claim 9.

17. A client comprising:

a processor and a guide application that is executable thereon to output a display of an EPG having a plurality of representations of content, wherein:

each said representation includes a uniform descriptor that identifies one or more of a plurality of applications that are executable to provide respective said content; and

the EPG is utilized to form one or more events in response to user

interaction with one or more said representations; and

a virtual tuner that is executable on the processor to:

identify a particular one of the plurality of applications from the uniform

descriptor;

launch the particular application for execution in response to one or more

said events; and

terminate execution of the particular application in response to one or

more said events.

18. The client as described in claim 17, wherein the virtual tuner identifies the particular application by comparing the uniform descriptor with one or more of a plurality of entries in an application identification table, wherein a matching said entry identifies the particular application.

19. The client as described in claim 17, further comprising a network interface configured as a tuner for receiving one or more broadcasts of content that include television programming.

20. The client as described in claim 17, further comprising a network interface for receiving content that includes television programming over the Internet.

21. The client as described in claim 17, wherein the virtual tuner is further executable to manage one or more windows that display an output of said content for

each said respective application.

22. The client as described in claim 21, wherein the management of the windows includes displaying one or more said windows in a foreground of a display in response to one or more said events.

23. The client as described in claim 17, wherein the virtual tuner is further executable on the processor to manage, during execution of the particular application, an output of said content provided by the particular application.

24. The client as described in claim 17, wherein the content includes remote content available over the Internet and local content available locally on the client.

25. A client comprising:

- a processor;
- a network interface, communicatively coupled to the processor, configured to provide a network connection to a wide area network (WAN);
- a output interface, communicatively coupled to the processor, configured to provide an output for rendering by a display device; and
- memory configured to maintain:
  - a plurality of applications that are executable on the processor to provide an output of content on the output interface, wherein at least one said content is television programming received at the network interface;

an EPG engine that is executable on the processor to provide an EPG for output on the output interface, wherein the EPG includes a plurality of representations of said content for selection; and

a virtual tuner that is executable on the processor to launch one or more said applications in response to selection of said content using the EPG.

26. The client as described in claim 25, wherein the virtual tuner is further executable to terminate execution of the one or more said applications.

27. The client as described in claim 25, wherein the virtual tuner is further executable to:

manage one or more windows corresponding to the plurality of applications; and  
at least one said window includes a display of the selected said content.

28. The client as described in claim 25, wherein:  
the network interface is configured as a tuner for receiving one or more broadcasts of the television programming over the WAN; and  
the WAN is configured as a broadcast network.

29. The client as described in claim 25, wherein the content provided by a first said application is not compatible with a second said application.

30. The client as described in claim 25, wherein the WAN is the Internet.

31. The client as described in claim 25, wherein the content includes remote content available over the WAN and local content available locally on the client.

32. A system comprising:

- a network;
- an EPG provider communicatively coupled to the network and including remote EPG data that describes remote content that is available over the network, the remote content including television programming;
- a client communicatively coupled to the network and including:
  - one or more processors and a plurality of applications that are executable thereon to provide at least one of local content and the remote content for rendering on a display device; and
  - local EPG data that describes the local content;
  - a guide application that is executable to generate an EPG from the remote and local EPG content that is configured to initiate one or more events; and
  - a virtual tuner that is executable to manage the plurality of applications in response to the one or more events.

33. The system as described in claim 32, the virtual tuner manages the plurality of applications by:

- launching one or more of the plurality of applications to process at least one of the local and remote content; and

terminating the one or more said applications when provision of the content is completed.

34. The system as described in claim 32, wherein the local EPG data is generated by the guide application by examining the client.

35. The system as described in claim 32, wherein said content provided by a first said application is not compatible with a second said application.

36. The system as described in claim 32, wherein the virtual tuner manages a lifecycle of each said application.

37. The system as described in claim 32, wherein the virtual tuner further manages one or more windows that include a display of at least one of the local and remote content.

38. The system as described in claim 32, wherein the EPG includes a plurality of representations, wherein at least one said representation represents the remote content and another said representation represents the local content.

39. A system comprising:

means for providing content for rendering, wherein:

the providing means is executable on a set-top box; and

at least one said content includes television programming received over the Internet;

means for displaying a user interface having a plurality of representations of said content, wherein each said representation is selectable to select corresponding said content; and

means for managing the providing means to provide said content that is selected by utilizing the user interface of the displaying means.

40. The system as described in claim 39, wherein the content includes remote content available over the Internet and local content available locally on the set-top box.